## **CLAIMS**

## What is claimed is:

- 1. Method for producing a parison (18) by means of a pressing process in a parison mold (1) of a press-blow glass forming machine, comprising the following steps:
  - (a) A gob (38) of molten glass is introduced from a feed device (32) from the top through a loading orifice (26) into a cavity (17) of the parison mold (1), while the parison mold (1) comprises a neck mold having a closed, longitudinally-divided neck tool (2) which forms a neck (19) of the parison (18),
  - (b) a pressing plunger (10) is pressed into the glass gob (38) through a middle through passage (42) of the neck mold until said pressing plunger in an end operating position (Figure 4;9) lies against the neck mold, wherein the parison (18) is preliminarily pressed until the cavity (17) is partially filled with molten glass,
  - simultaneously with or following Step (b) pressure is exerted using a pressing element (44), which defines a part of the cavity (17), on a base (66) of the parison (18) which has been preliminarily pressed according to Step (b), until the cavity (17) is completely filled with molten glass and the parison (18) is finish-pressed, and
  - (d) when the pressing plunger (10) is in the end operating position (Figure 4; 9), the cavity (17) is completely filled with molten glass and the parison (18) has been formed, on the one hand the pressing element (44) and all the components of the parison mold (1) with the exception of the still closed neck tool (2) are removed to the extent that the still closed neck tool (2) can be transferred with the parison (18) held by the neck tool (2) at the neck (19) into a finish-forming station of the glass forming machine and on the other hand the pressing plunger (10) is moved back out of the parison (18) into an end discharge position (Figure 6),

characterized by the following steps:

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- (A) In Step (b) the pressing plunger (10) is moved into its end operating position (Figure 4;9) as far as the stop surface (24) on the neck tool (2), and
- (B) an axially outer sealing edge (20) of the neck (19) of the parison (18) is completely formed by the pressing plunger (10).
- 2. Method according to claim 1, characterized in

that the glass comes into contact with the pressing element (44) already in Step (A), and

that the pressing element (44) is moved out of the cavity (17) by the glass.

3. Method according to claim 1 or 2, characterized in

that the parison mold (1) comprises longitudinally-divided parison mold halves (5,6),

that the glass gob (38) is introduced through the loading orifice (26) formed in a base of the closed parison mold halves (5,6), and

that the loading orifice (26) is closed after loading by means of the pressing element 44.

4. Method according to any one of claims 1 to 3, characterized in that

the maximum penetration depth of the pressing element (44) into the cavity (17) occurring in Step (B) is determined by means of sensing (57) the displacement of the pressing element (44) relative to the parison mold (1), and

that the displacement sensing (57) is used for controlling and/or regulating the mass of the glass gobs (38) leaving the feed device (32).

5. Apparatus for producing a parison (18) by means of a pressing process in a parison mold (1) of a press-blow glass forming machine,

wherein a gob (38) of molten glass can be introduced from a feed device (32) at the top through a loading orifice (26) into a cavity (17) of the parison mold (1), while the parison mold (1) comprises a neck form with a closed, longitudinally-divided neck tool (2) which forms a neck (19) of the parison (18),

with a pressing plunger (10) which can be pressed into the glass gob (38) through a middle through-passage (42) of the neck mold as far as an end operating position (Figure 4;9) in position against the neck mold for the purpose of the preliminary pressing of the parison (18) and which pressing plunger can be removed from the parison (18) after the parison (18) has been formed,

and with a pressing element (44) which can move relatively to the parison mold (1) and defines a part of the cavity (17),

wherein using the pressing element (44) it is possible to exert pressure on a base (66) of the preliminarily pressed parison (18) until the cavity (17) is completely filled with molten glass and the parison (18) is finish-pressed,

characterized in that the pressing plunger (10) in its end operating position (Figure 4;9) lies (24) against the neck tool (2),

and that an axially outer sealing edge (20) of the neck (19) of the parison (18) can be completely formed by the pressing plunger (10).

6. Apparatus according to claim 5,

characterized in that the parison mold (1) comprises longitudinally-divided parison mold halves (5,6),

that the loading orifice (26) is formed in a base of the closed parison mold halves (5,6),

and that the loading orifice (26) can be closed after loading by means of the pressing element (44).

7. Apparatus according to claim 5,

characterized in that the parison mold (1) comprises a block mold (72) which is not longitudinally-divided,

that the pressing element (44) is displaceably mounted in a lower base orifice (77) of the block mold (72),

that the closed neck tool (2) in the upwards direction is adjacent to the loading orifice (26) of the block mold (72),

and that a locking ring (74) of the block mold (72) in a radially outwards direction lies adjacent to the closed neck tool (2).

8. Apparatus according to any one of the claims 5 to 7,

characterized in that a shaft (16), which is wider than the pressing plunger (10), is adjacent to a foot (22) of the pressing plunger (10),

and that a forming ring (21) for the purpose of forming the complete axially outer

sealing edge (20) of the neck (19) of the parison (18) is formed in an annular end face (23) of the shaft (16) adjacent to the foot (22).

9. Apparatus according to claim 8,

characterized in that the end face (23) for the purpose of defining the end operating position (Figure 4;9) of the pressing plunger (10) lies against a stop surface (24) of the closed neck tool (2).

10. Apparatus according to any one of claims 5 to 9,

characterized in that a cylindrical shaft (16) is adjacent to a foot (22) of the pressing plunger (10),

and that the shaft (16) is received on a last part of the path of the pressing plunger (10) as far as its end operating position (Figure 4;9) in a centering ring (41) which is fixed relative to the parison mold (1) and is guided and centered in the radial direction through the centering ring (41).

11. Apparatus according to claim 10,

characterized in that the centering ring (41) is not longitudinally divided and that the centering ring (41) is held radially outwards in a holding groove (7) of the neck tool (2).

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